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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,764	08/19/2003	Katsuki Hazama	21737-00013-US2	3736
30678	7590 09/06/200	5	EXAMINER	
	Y BOVE LODGE &	TRUONG, BAO Q		
SUITE 800 1990 M STREET NW WASHINGTON, DC 20036-3425			ART UNIT	PAPER NUMBER
			2187	
	·		DATE MAILED: 09/06/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	N					
	Application No.	Applicant(s)				
	10/642,764	HAZAMA, KATSUKI				
Office Action Summary	Examiner	Art Unit				
	Bao Q. Truong	2187				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period or - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fron t, cause the application to become ABANDON	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 19 A	ugust 2003.					
	•					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>16,17,22 and 23</u> is/are pending in the	Claim(s) <u>16,17,22 and 23</u> is/are pending in the application.					
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>16,17,22 and 23</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>19 August 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority 	s have been received. s have been received in Applicat	tion No. <u>08/931,519</u> .				
application from the International Bureau		oc in the National Olago				
* See the attached detailed Office action for a list		ed.				
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary					
2) Notice of Dransperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>08/19/2003</u> .	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152)				

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1. The instant application having Application No. 10/642,764 has a total of 4 claims pending in the application; there are 2 independent claims and 2 dependent claims, all of which are ready for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. § 1.63.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Japan on 18 September 1996 and 06 December 1996. It is noted that applicant has filed certified copies of the JP-267844/1996 and JP-342663/1996 applications as required by 35 U.S.C. 119(b) in parent Application No. 08/931,519 filed on 16 September 1997.

Information Disclosure Statement

4. As required by M.P.E.P § 609 (C), the applicant's submission of the Information Disclosure Statement, dated on 19 August 2003, is acknowledged by the examiner; and the cited reference has been considered in the examination of the claims now pending. As required by M.P.E.P § 609 C (2), a copy of the PTO-1449 initialed and dated by the examiner is attached to the instant office action.

Drawings

5. The applicant's drawings submitted are acceptable for examination purposes.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it is not within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 16-17 and 22-23 are rejected under the judicially created doctrine of double patenting over claims 7-10 of U. S. Patent No. 6,853,581 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

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Claim 16 of Present Application

A method for reading n (n ≥ 2) number of bits (X1, X2, ..., Xn) from a plurality of multilevel memory cells arranged so as to correspond to a physical address space, each cell having at least one transistor, each cell storing 2ⁿ levels of data each expressed by the bits (X1, X2, ..., Xn), comprising the steps of converting a logical address into a physical address included in the physical address space; judging whether a logical address space including the logical address matches the physical address space;

applying a predetermined reference voltage
to a gate of the transistor to determine
whether a current flows between a source
and a drain of the transistor when the logical
address space matches the physical address
space; and

outputting the specified bit from one of the cells corresponding to the physical address.

Claim 7 of U.S. 6,853,581 B2

A method for reading n ($n \ge 2$) number of bits (X1, X2, ..., Xn) from a plurality of multilevel memory cells arranged so as to correspond to a physical address space, each cell storing 2^n levels of data each expressed by the bits (X1, X2, ..., Xn), comprising the steps of:

converting a logical address into a physical address included in the physical address space; judging whether a logical address space including the logical address matches the

physical address space;

specifying the most significant bit X1, by

one time specifying operation, by means of a

reference value when judged that the logical
address space matches the physical address
space; and

outputting the specified bit from one of the cells corresponding to the physical address.

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According to figures 8-9 and column 15: line 54 through column 18: line 37 of U.S. 6,853,581 B2, the one time specifying operation comprises applying a predetermined reference voltage to a gate of the transistor to determine whether a current flows between a source and a drain of the transistor (see figure 8: step S5; figure 9: element 3b; and column 16: lines 20-38) when the logical address space matches the physical address space (see figure 8: step S3-S4). Therefore, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Claim 17 of the application is disclosed and covered by claim 8 of U.S. 6,853,581 B2.

Claim 22 of the application is disclosed and covered by claim 9 of U.S. 6,853,581 B2.

Claim 23 of the application is disclosed and covered by claim 10 of U.S. 6,853,581 B2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

U.S. 6,895,543 B2 and U.S. 5,844,841 disclose read/write method for multilevel memories.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q Truong whose telephone number is (571) 272-4202. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00 PM (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks, can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

bot all wait

BT

Patent Examiner

29 August 2005

Donald Sparks

Supervisory Patent Examiner

Technology Center 2100